

(12) United States Patent Ueno

(45) **Date of Patent:**

(54) ANTI-CONSTIPATION COMPOSITION

Inventor: Ryuji Ueno, Potomac, MD (US)

Assignee: Sucampo AG, Zurich (CH)

(*) Notice: Subject to any disclaimer, the term of this

patent is extended or adjusted under 35

U.S.C. 154(b) by 0 days.

This patent is subject to a terminal dis-

claimer.

(21) Appl. No.: 11/142,251

(22)Filed: Jun. 2, 2005

(65)**Prior Publication Data**

US 2005/0222195 A1 Oct. 6, 2005

Related U.S. Application Data

- (62) Division of application No. 10/443,046, filed on Mav 22, 2003, now abandoned, which is a division of application No. 10/138,650, filed on May 6, 2002, now Pat. No. 6,610,732, which is a division of application No. 09/655,760, filed on Sep. 5, 2000, now Pat. No. 6,414,016.
- (51) **Int. Cl.** A61K 31/44 (2006.01)A61K 31/34 (2006.01)
- **U.S. Cl.** 514/300; 514/302; 514/469
- (58) Field of Classification Search 514/302,

See application file for complete search history.

(56)**References Cited**

U.S. PATENT DOCUMENTS

5,164,415 A	11/1992	Ueno
5,284,858 A	2/1994	Ueno et al.
5,317,032 A	5/1994	Ueno et al.
5,958,876 A	9/1999	Woo
6,326,360 B1	12/2001	Kanazawa et al.
6,583,174 B1	6/2003	Ueno et al.

FOREIGN PATENT DOCUMENTS

ΑU	WO-9850043	* 11/1998
$\mathbf{A}\mathbf{U}$	200076856 B	2 7/2001
CA	1312014	12/1992
CA	2150287	12/1995
EP	0 310 305 A	4/1989
EP	1 586 631 A	2 10/2005

US 8,071,613 B2 (10) Patent No.: *Dec. 6, 2011

JP	53-050141		5/1978
JP	2-32055		2/1990
JP	04-210631		7/1992
WO	WO 01/25099 A		4/2001
WO	WO 01/27099	*	4/2001

OTHER PUBLICATIONS

Preventing constipation Jan. 2002.*

Marks Constipation(1996).*

www.uihealthcare.com/topics/digestivesystem/constipation.html (2005) 5 pages.*

www.pjonline.com, How to deal with constipation 23-26, Jul. 7, 2007.

Koichi Takahashi, Takashi Suzuki, Hitomi Sakano, and Nobuyasu Mizuno, Effect of Vehicles on Diclofenac Permeation across Excised Rat Skin, Biol. Pharm. Bull., vol. 18, No. 4, pp. 571-575 (1995). Hawley, G., Condensed Chemical Dictionary, 10th edition, 1981, p.

Communication from Australian Patent Office dated Aug. 15, 2005. Tropical Traditions, www.tropicaltraditions.com/coconut_oil_is_ the_healthiest_oil.htm, 2002-2006.

Bulletin of the chemical Society of Japan, vol. 41, No. 11, 1968, pp. 2798-2800.

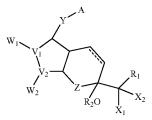
Opposition Communication for IN223147 dated Nov. 21, 2009.

* cited by examiner

Primary Examiner — Brandon Fetterolf Assistant Examiner — Shirley V Gembeh (74) Attorney, Agent, or Firm — Sughrue Mion, PLLC

(57)ABSTRACT

An object of the present invention is to provide an anticonstipation composition containing a halogenated-bi-cyclic compound as an active ingredient in a ratio of bi-cyclic/ mono-cyclic structure of at least 1:1. The halogenated-bicyclic compound is represented by Formula (I):



where X_1 and X_2 are preferably both fluorine atoms. The composition can be used to treat constipation without substantive side-effects, such as stomachache.

26 Claims, No Drawings